

SECTION 14D

PLAN SUBMITTAL

Water Construction Plans:

Water Construction Plans submitted to the Augusta Utilities Department for review must contain the following at a minimum:

- ◆ Project Name
- ◆ Developer's name, address, and phone number
- ◆ Owner's name, address, and phone number
- ◆ Design professional's name, address, and phone number
- ◆ Design professional's signed seal
- ◆ Location/Vicinity Map
- ◆ North arrow on all applicable sheets
- ◆ Scale (minimum 1" = 20'; maximum 1" = 100')
- ◆ Show subject property information including subdivision name, lot numbers, block letters, property owners, etc.
- ◆ Show adjacent property information including subdivision name, property owners, etc.
- ◆ Show existing conditions, structures, pavement widths, right-of-way widths, easements, adjoining roads, etc.
- ◆ Show the locations, size and material of existing water mains along with other appurtenances. Existing water lines shall be shown as dashed lines.
- ◆ Show the location, size and material of proposed water mains, valves, hydrants and service lines along with all other water appurtenances involved with the proposed project. Proposed water lines shall be shown as solid lines.
- ◆ Number all fire hydrants.
- ◆ Show locations, type and size of all backflow prevention devices.
- ◆ Label all easements with respect to type and size.
- ◆ Show easements shaded-in to be dedicated to the Augusta Utilities Department for water lines installed outside proposed right-of-ways.

Sanitary Sewer Construction Plans:

Sanitary Sewer Construction Site Plans submitted to the Augusta Utilities Department for review must contain the following at a minimum:

- ◆ Project Name
- ◆ Developer's name, address, and phone number
- ◆ Owner's name, address, and phone number
- ◆ Design professional's name, address, and phone number
- ◆ Design professional's signed seal
- ◆ Location/Vicinity Map
- ◆ North arrow on all applicable sheets
- ◆ Scale (minimum 1" = 20'; maximum 1" = 100')
- ◆ Show subject property information including subdivision name, lot numbers, block letters, property owners, etc.
- ◆ Show adjacent property information including subdivision name, property owners, etc.
- ◆ Show existing conditions, structures, pavement widths, right-of-way widths, easements, adjoining roads, etc.
- ◆ Show the locations, size and material of existing sanitary sewer lines and force mains along with other appurtenances. Existing sewer lines shall be shown as dashed lines.
- ◆ Show the proposed location, size and material of sewer mains, force mains, manholes, service lines with clean-outs and sewerage lift stations involved with the proposed project. Proposed sewer lines shall be shown as solid lines.
- ◆ Creek crossings require full scale details at 1" = 20' scale minimum, including piers, collars and all other appurtenances.
- ◆ Show easements shaded-in to be dedicated to the Augusta Utilities Department for sanitary sewer lines installed outside of proposed rights-of-way.
- ◆ Show easements dedicated to the Augusta Utilities Department for sanitary sewer lines to serve adjacent properties.

Plan and Profile:

Plan and profile sheets shall be provided for all sanitary sewers (except service laterals). Profiles shall have a horizontal scale of not more than 1" = 100' and a vertical scale of not more

than 1" = 10'. The plan view should normally be shown on the same sheet as the profile. Plan and profile view should have line designations, station numbers, manhole numbers and any other indexing necessary to easily correlate the plan and profile views.

Plan and Profiles shall show the following:

- ◆ Location and names of streets, sewers and drainage easements
- ◆ Line of existing and proposed ground surface, the grade of the sewer between each two adjacent manholes, invert of sewer in and out of each manhole (label as directional if more than 2 pipes connected to manhole), and surface elevation of each manhole. All manholes shall be numbered on the plan and correspondingly numbered on the profile. The station number shall be shown for each manhole.
- ◆ The location and elevation of adjacent parallel stream beds and of adjacent water surfaces shall be shown on the plan and profile.
- ◆ Sizes, locations and inverts of all special features such as connections to existing sewers, wet wells, concrete encasement, collar walls, elevated sewers, piers, special manhole covers such as vented outfall or sealed covers, etc.
- ◆ All structures, both above and below ground, which might interfere with the proposed construction, particularly water mains, gas mains, storm drains, utility conduits, etc. Identify pipe crossings with letter, or other, designation on the plan and profile. Specify top of pipe and bottom of pipe elevations at crossings to verify there is no conflict. See Section 14.21.11.

General Notes:

Notes to be shown on Site Plans include:

1. The Developer and/or Developer's Contractor is responsible for verifying the exact location, size and material of any existing water or sewer facility proposed for connection or use by this project.
2. All construction of water and sanitary sewer lines shall be in accordance to Augusta Utilities Department's Standards and Specifications.

3. All water lines shall be class 200 PVC meeting AWWA C-900, unless otherwise shown.
4. All water lines are to be tested, chlorinated, and checked for bacteria.
5. Augusta Utilities Engineering Department shall be notified 24 hours prior to any construction, tie-ins, or testing of water or sanitary sewer lines. (706-772-5503) If no answer leave message.
6. Copper Wire (12 gauge, Bare Single Strand) shall be attached along top of all buried PVC water lines , wrapped around service corporations and stubbed up into all valve boxes for locating purposes.
7. Per Augusta Utilities Specifications for backflow installations for non-residential development, a minimum "Double Check" Backflow device shall be installed on the customer's side of all service lines (domestic, irrigation and fire). Fire lines require a "Detector Type" backflow device. Backflow Devices shall be tested by a certified person within 5 working days of installation and the results furnished to the Utilities Engineering Department within 10 working days of installation prior to any water use.
8. Per Augusta Utilities Specifications for backflow installations residential development shall install a "Dual Check" Backflow Device on the customer's side of

service line at the point of tie-in to the water meter.
9. All water valves on the main lines, including hydrant laterals, shall be: **open-left** if installed south of Gordon Highway (SR 10); or **open-right** if installed north Gordon Highway.
10. The Developer and/or Contractor shall furnish and install an approved meter box (Rome type 10" x 19" x 10" cast iron or approved equal) at the termination point of all water services and maintained until such time as meter is installed.
11. All water meters shall be purchased from the August Utilities Department.
12. Maximum sanitary sewer infiltration shall not exceed 100 GPD/inch of pipe diameter per mile.
13. All tie-ins to existing manholes shall be cored. All manholes require "K or N Seal" or equal rubber boots.
14. No connection to existing sanitary sewer lines until the proposed sewer line is inspected and approved by the Augusta Utilities Engineering Department.
15. Sanitary sewer clean-outs shall be installed at all individual services as shown in detail and installed as not to be under driveways.
16. Finished floor elevations of all proposed buildings shall be a minimum of five (5) feet above the invert elevation of the sanitary sewer main/ manhole at the point of tie-in
17. Provide 0.1 foot drop across all sanitary sewer manholes.
18. Sewer force main shall be PVC C-900, class 200 or D.I.P. and shall have 12 gauge bare single strand wire attached along the top of the main.
19. A minimum 15' Utility Easement Centered over all water lines and a minimum 20' Utility Easement centered over all sanitary sewer lines shall be deeded to the Augusta-Richmond County at completion and acceptance of said lines.
20. Disturbance to any Survey Markers or Monuments requires re-establishment by a

licensed surveyor at the Contractor's expense.

21. For private developments, the Developer/Owner shall be responsible for pavement patching/replacement and the site restoration whenever Augusta Utilities Department must repair/replace utilities on the property. The developer shall arrange for access by the Augusta Utilities Department as required to make the repair/replacement of the utility
22. Contractor shall contact the Utilities Protection Inc. "Call Before You Dig" service in order to locate utilities prior to starting any excavation or construction.
23. If in the course of construction, a conflict arises between the new work and the existing water and sewer facilities, it will be the responsibility of the Owner/Developer, at his expense, to correct same as directed by a representative of Augusta Utilities Department.
24. A right-of-way encroachment permit shall be obtained from the Public Works Department prior to commencing work within Augusta right-of-way.

Details:

The detail drawings at the end of this Section shall be included with the construction drawings.

Record (As-Built) Drawings:

At the completion of the water and/or sanitary sewer construction and prior to recording the final plat, the Contractor shall furnish the Augusta Utilities Department's Inspector with Record Drawings of the project. The Record Drawings must show all field changes made to the approved drawings. Record Drawings shall be prepared by a registered surveyor and/or professional engineer and submitted in digital format, as well as hard copy. Acceptable digital formats include Arc/Info, Arc/Info export file, or a DXF file generated by AutoCad from the DWG file.

All Digital Record Drawings submitted must conform to:

Projection: Georgia State Plane East

Datum: NAD83

Units: Feet

A Data Dictionary should be included with each DXF file defining individual layers. The design engineer shall use GPS to verify 2 or 3 points prior to conversion to state plane coordinates.

Water record drawings shall be a separate plan from the sewer record drawing. Maximum plan size shall be 24" x 36". Scale shall be no larger than 1" = 20' and no smaller than 1" = 100'. No hand-drawn or marked up construction plans will be accepted as record drawings. "AS-BUILT DRAWING" shall be stamped in large print on the plan. If the project is a phase of a subdivision, a location sketch of the entire subdivision with subject phase outlined shall appear on drawings.

Record drawings shall contain the following information:

- ◆ Developer's name, address, and phone number.
- ◆ Contractor's name, address, and phone number.
- ◆ Lot numbers.
- ◆ Road names and right-of-way widths.
- ◆ Water and sanitary easements.
- ◆ All water service locations and distances from both front property corners of serviced lot.
- ◆ All sanitary sewer services with clean-outs and distances from both property corners of serviced lot and from nearest manhole.
- ◆ Invert and top elevations of all manholes.

Acceptance of Work:

Once an approved Record Drawing, final inspection and final plat with maintenance agreement is recorded, the Augusta Utilities Department will accept the new constructed system. The Developer/Owner shall be responsible for any defects in materials or workmanship within the

subject system for a period of twelve (12) months from the date of the maintenance agreement.

IMPORTANT: A note stating that Augusta Utilities shall not be responsible for pavement repair or site restoration associated with repair/replacement of a water or sewer line shall be included on all final plats for private developments.